

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application:

Application No.: 10/614,109

Filed: July 8, 2003

Title: System and Method for Packet Transmission from Fragmented Buffer

Commissioner for Patents

Washington, D.C. 20231

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST**  
**(REVOCATION OF PRIOR POWERS)**

As assignee of record of each of the patent applications listed in the table of attachment A,

**REVOCATION OF PRIOR POWERS OF ATTORNEY**

all powers of attorney previously given in each of the listed patent applications are hereby revoked, and

**NEW POWER OF ATTORNEY**

the following attorneys/agents are hereby appointed to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

**24504**

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

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## **ASSIGNEE OF ENTIRE INTEREST**

### **CONEXANT SYSTEMS, INC.**

100 Schultz Drive  
Red Bank, New Jersey 07701


### **ASSIGNEE CERTIFICATION**

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same.

Each of the patent applications listed in Attachment A is owned by Conexant Systems, Inc., by operation of law, express written assignment, or both. With regard to the recordation of written assignment documents, some of the patent applications listed in Attachment A do not yet have Conexant Systems, Inc.'s ownership interests officially recorded with the assignment branch of the U.S. Patent & Trademark Office. By way of further explanation, the corporate entity of GlobespanVirata, Inc. changed its name to Conexant, Inc. (a corporate affiliate of Conexant Systems, Inc.), and this name change is reflected in a certificate of name change, filed with the Delaware Secretary of State on May 28, 2004. Further, the corporate entity of Conexant, Inc. is in the process of winding down, and the ownership of patent applications has been conveyed to Conexant Systems, Inc. Written assignment documents reflecting this conveyance will be recorded with the U.S. Patent & Trademark Office in due course.

In my capacity of Chief IP Counsel for Conexant Systems, Inc., I am authorized to sign this document, and otherwise act on its behalf in connection with the management and handling of all of the patent applications listed in Attachment A.

Date: 9-22-06

  
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Sam Talpalatsky  
Chief IP Counsel

# Attachment A

| No. | Serial No  | Conexant No. | Application Title  | Filing Date | Assignment (Reel/Frame)       |
|-----|------------|--------------|--|-------------|-------------------------------|
| 1   |            | 05CXT0095DL  | Techniques to Resolve SNR-Margin Difference between Fast and Interleave Channels under Colored Noise Condition for DMT-Based DSL System        | 8/31/2006   | Not yet Recorded in the USPTO |
| 2   |            | 05CXT0110DL  | Design of Minimum Power Leakage Windowing for VDSL Systems Via Least Square Method   | 8/31/2006   | Not yet Recorded in the USPTO |
| 3   | 11/315,372 | 05CXT0158DL  | A New Bit-Loading Algorithm for a DMT Receiver   |             | 17368/0134                    |
| 4   | 10/063,384 | GV104        | A System for Switching ATM Cells   | 4/17/2002   | Not yet Recorded in the USPTO |
| 5   | 10/254,970 | GV106        | Voice/Tone Discriminator   | 9/26/2002   | 13336/0576                    |
| 6   | 10/138,700 | GV112        | System and Method for Distributed Processing of Packet Data Containing Audio Information   | 5/6/2002    | 13119/0883                    |
| 7   | 10/097,598 | GV119        | Sticky Condition Bit for Efficient Processing of Program Flow Changes<br>Sticky Condition Bit for Efficient Processing of Program Flow Changes | 3/15/2002   | 12714/0832                    |
| 8   | 10/259,432 | GV132        | Jitter Buffer for Audio Encapsulated in RTP Packets  | 9/30/2002   | 13560/0287                    |
| 9   | 10/050,128 | GV135        | Varying an Echo Canceller Filter Length Based on Data Rate   | 1/18/2002   | 12499/0607                    |
| 10  | 10/757,587 | GV139        | Minimum Processor Instruction for Implementing Weighted Fair Queuing and Other Priority Queuing  | 1/15/2004   | 14895/0169                    |
| 11  | 11/234,121 | GV143        | Method and System for Generating Colored Comfort Noise in the Absence of Silence Insertion Description Packets                                 | 9/26/2005   | Not yet Recorded in the USPTO |
| 12  | 10/063,005 | GV149        | Clock Skew Compensation for a Jitter Buffer  | 3/11/2002   | 12464/0190                    |
| 13  | 09/683,922 | GV150        | A Method of Connecting a PPP Client to a PPPoE Access Concentrator Via a Bridge  | 3/1/2002    | 12823/0693                    |
| 14  | 10/064,340 | GV153        | Communications System Using Rings Architecture   | 7/2/2002    | 13425/0140                    |
| 15  | 10/230,054 | GV160        | Process and Algorithm for Secure Object Manipulation   | 8/29/2002   | 13611/0059                    |

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|------------|------------------|---------------------|--|--------------------|--------------------------------|
| 16         | 10/064,335       | GV172               | Comunications System Using Rings Architecture                                | 7/2/2002           | 13425/0127                     |
| 17         | 10/735,678       | GV181               | Scheduling Thread Execution  |                    | Not yet Recorded in the USPTO  |
| 18         | 10/183,421       | GV199               | Estimating Salz SNR for G.SHDSL Data Rates Using Line Probe                  | 6/28/2002          | 13381/0986                     |
| 19         | 10/340,635       | GV203               | Integrated PON Processor   | 1/13/2003          | 13665/0085                     |
| 20         | 10/614,338       | GV204               | method and system for allocating bandwidth                                   | 7/8/2003           | 14610/0799                     |
| 21         | 10/064,445       | gv207               | Improved synchronous data access   | 7/15/2002          | Not yet Recorded in the USPTO  |
| 22         | 10/307,296       | GV209               | Method and System for Intertask Messaging between Multiple Processors        | 12/2/2002          | 13540/0731                     |
| 23         | 10/340,651       | GV210               | System and Method for Improved Data Protection in PONs                       | 1/13/2003          | 13664/0912                     |
| 24         | 10/340,606       | gv211               | System and Method for Dynamic Bandwidth Allocation in PONs                   | 1/13/2003          | 13664/0838                     |
| 25         | 10/642,309       | GV216               | Operating System for Executing Computer Software Applications                | 8/18/2003          | Not yet Recorded in the USPTO  |
| 26         | 10/614,337       | GV217               | Method and System for Prioritizing UTOPIA CLAV Status Polling                | 7/8/2003           | 14641/0785                     |
| 27         | 10/615,613       | GV218               | Method and System for Optimizing UTOPIA CLAV Polling Arbitration             | 7/8/2003           | 15219/0526                     |
| 28         | 10/614,339       | GV219               | Method and System for Optimizing UTOPIA CLAV Polling Arbitration             | 7/8/2003           | Not yet Recorded in the USPTO  |
| 29         | 10/614,220       | GV220               | A Method for the Generation of Pseudo Random Numbers                         | 7/8/2003           | 15581/0521                     |
| 30         | 10/064,226       | gv221               | Method and Apparatus for PPP auto-connect                                    | 6/21/2002          | 13259/0531                     |
| 31         | 10/430,278       | GV222               | Method and system for preventing data loss in a VoIP system                  | 5/7/2003           | 14379/0222                     |
| 32         | 10/746,235       | GV224               | Providing Quality of Service in Asynchronous Transfer Mode Cell Transmission |                    | 15432/0228                     |
| 33         | 10/250,236       | GV229               | Apply transmit windowing for PSD in ADSL+ networks                           | 6/16/2003          | 14322/0958                     |
| 34         | 10/614,109       | GV231               | Packet Transmission from Fragmented Buffer                                   | 7/8/2003           | 14273/0822                     |

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|-----|------------|--------------|---|-------------|-------------------------------|
| 35  | 10/614,374 | GV232        | Providing Network Timing Recovery   | 7/8/2003    | 15579/0905                    |
| 36  | 10/614,219 | GV233        | Interleaving SDRAM Device Access Requests   | 7/8/2003    | 15581/0501                    |
| 37  | 10/626,714 | GV234        | DBMsOL and FBMsOL Power Spectral Density Masks  | 7/25/2003   | 14801/0126                    |
| 38  | 10/626,727 | GV235        | Reduced SNR Handshake Signaling in ADSL Systems   | 7/25/2003   | 14802/0271                    |
| 39  | 10/626,771 | GV236        | Reduced Symbol Rate Handshake Signaling in ADSL Systems   | 7/25/2003   | 15346/0394                    |
| 40  | 10/626,770 | GV237        | Power Spectral Density Masks for ADSL+  | 7/25/2003   | 14684/0138                    |
| 41  | 10/263,506 | GV246        | Fractional local peak detection & mitigation PAR reduction  | 10/4/2002   | 14038/0734                    |
| 42  | 10/263,732 | GV247        | STPI PAR reduction  | 10/4/2002   | 13594/0402                    |
| 43  | 10/714,907 | GV256        | Selectable Mask for LDSL  |             | 15125/0990                    |
| 44  | 10/377,514 | GV257        | Zero-Installation PPP-Bridge (ZIPB) Setup for LAN-to-WAN Connectivity                             | 3/3/2003    | 14076/0547                    |
| 45  | 10/393,345 | GV258        | Adaptive RFI Canceller for xDSL   | 3/21/2003   | 14195/0874<br>18042/0403      |
| 46  | 10/644,023 | GV263        | Method and apparatus for generating a 64 state 4-D trellis code in DMT                            | 8/20/2003   | Not yet Recorded in the USPTO |
| 47  | 10/672,078 | GV265        | Reducing Interferences Due to Handshake Tones   | 9/29/2003   | 15060/0677                    |
| 48  | 10/672,079 | GV266        | Reducing Interferences due to handshake tones   | 9/29/2003   | 15059/0804                    |
| 49  | 10/705,909 | GV272        | Attaching a USB network adapter supporting both RNDIS and non-RNDIS for capable operating systems |             | 15458/0615                    |
| 50  | 10/714,867 | GV273        | Smart DSL Systems for LDSL  |             | 15472/0688                    |
| 51  | 10/408,364 | GV274        | Reduced Complexity Time-Frequency Equalizer for Discrete Multi-Tone Based DSL Systems             | 4/8/2003    | 14219/0111                    |
| 52  | 10/618,678 | GV275        | Channel Equalization and Cyclostationary Interference Rejection for ADSL-DMT Modems               | 7/15/2003   | 14284/0549                    |
| 53  | 10/874,329 | GV276        | Technique for Improving Multi-Channel Multi-Tone Transmissions                                    | 6/24/2004   | 15847/0507                    |
| 54  | 10/849,569 | GV277        | Fourier Transform Side Lobe Mitigation  | 5/20/2004   | 15803/0667                    |
| 55  | 10/860,286 | GV279        | Multilevel Channel Coding in ADSL   | 6/4/2004    | 15853/0901                    |

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|-----|------------|--------------|---|-------------|-------------------------------|
| 56  | 10/702,456 | GV280        | ATM HEADER COMPRESSION USING HASH TABLES  | 11/7/2003   | 14678/0361                    |
| 57  | 11/032,203 | GV281        | Systems and Methods for Achieving Improved ADSL Data Rates Over USB 1.1 Channel                       | 1/10/2005   | 16165/0967                    |
| 58  | 10/714,660 | GV283        | Enhanced Smart DSL Systems for LDSL   |             | 15258/0198                    |
| 59  | 10/714,661 | GV284        | Enhanced Smart DSL for LDSL   |             | 15471/0367                    |
| 60  | 10/714,655 | GV285        | Power Spectral Density Masks for Improved Spectral Compatibility                                      |             | 15200/0837                    |
| 61  | 10/952,435 | GV295        | Canceling Radio Frequency Interferers (RFI) in xDSL Signals   | 9/29/2004   | 17520/0839                    |
| 62  | 10/970,718 | GV302        | Hierarchical Trellis Coded Modulation   |             | 16193/0890                    |
| 63  | 11/035,422 | GV307        | Single End Loop Testing for DSL Provisioning and Maintenance  | 1/14/2005   | 16425/0124                    |
| 64  | 10/721,259 | GV310        | Selecting an Optimal Asymmetric Digital Subscriber Line Mode  |             | 14744/0276                    |
| 65  | 10/824,611 | GV312        | Techniques for Dynamic Bin Allocation   | 4/15/2004   | Not yet Recorded in the USPTO |
| 66  | 10/996,054 | GV315        | Optimizing Bit Rate in a DMT Quad System  |             | 15816/0781                    |
| 67  | 11/031,020 | GV324        | Real-Time Formation of Optimal Power Spectral Density Masks   | 1/10/2005   | Not yet Recorded in the USPTO |
| 68  | 10/808,549 | GV330        | MIMO Dynamic PSD Allocation for DSL Networks  | 3/25/2004   | 15565/0197                    |
| 69  | 11/320,918 | GV411        | Time-Domain Equalizer for DMT-Based VDSL Systems with Cyclic Extension in Training Signals            |             | 17426/0490                    |
| 70  | 11/224,328 | GV417        | Multistage Signal Detection in MIMO Transmissions and Iterative Detection of Precoded OFDM            | 9/13/2005   | 17282/0843                    |
| 71  | 11/248,224 | GV419        | Method and System for Turbo Trellis Coded Modulation Scheme for Communication Systems                 |             | Not yet Recorded in the USPTO |
| 72  | 11/282,109 | GV420        | Method and System for Adaptive VDSL System with Variable Sampling Frequency and Time-Domain Equalizer |             | 17252/0040                    |
| 73  | 11/197,524 | GV422        | System and Method for Echo Cancellation   | 8/5/2005    | 17007/0806                    |

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| 74  | 11/297,634 | GV424        | M&S for Dynamic Interleaver Adaptation Scheme | 12/9/2005   | 17723/0057<br>17699/0904 |

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|----|------------|-------|--|-----------|--------------------------|
| 75 | 11/297,632 | GV424 | Method and System for Dynamic Interleaver Adaptation Scheme in VDSL  | 12/9/2005 | 17699/0904<br>17723/0057 |
| 76 | 11/009,710 | GV425 | Method and System for Virtual Exchange Reference Impact (VERI) for Use in Mixed Spectrum Management in DSL |           | 16366/0657               |
|    |            |       |  |           |                          |
|    |            |       |  |           |                          |